Lab Report Form

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Course: Advanced Chemistry

Title of Lab Experiment: The Kinetic Theory of Matter
Purpose: To learn the effect of temperature on the random motion of water molecules
Materials:

- Cobalt Chloride
- Two plastic test tubes
- Test tube rack to hold the test tubes
- Chemical scoop
- Two medicine droppers
- Safety goggles
- Someone to help you
- Water
- Heat and container that you can use to boil water
- A small glass
- A Styrofoam cup
- A white piece of paper

Procedure:

1. Fill the glass with cold water from the tap
2. Begin boiling enough water to fill the Styrofoam cup
3. While waiting for the water to boil, measure a small scoop of cobalt chloride into the bottom of each test tube
4. Use the medicine dropper to fill the test tube with the water from the glass
5. Add the water slowly as you want to mix the cobalt chloride without stirring
6. Once the cobalt chloride is mixed with the water move only one test tube from the rack into the Styrofoam cup with boiling water
7. Let the test tubes sit for one hour
8. Once the hour is up, place a piece of white paper behind the test tubes and observe them
9. Rinse everything and put it all away

Data:

Test tube 1:
Water temperature Regular tap water

Test tube 2:
Water temperature Boiling water

Results:

Test tube 1:
Appearance after sitting for an hour: The water is clearer at the top of the test tube

Test tube 2:
Appearance after sitting for an hour: The water is clearer at the bottom of the test tube

Conclusions:
As temperature rises, the kinetic energy of particles increases.
References:
Advanced Chemistry in Creation 2nd Edition